

Amendments to the Claims

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of applying a self-assembled monolayer of a molecular species to a surface of an article, comprising:

- providing on at least a portion of a stamping surface of a stamp a self-assembled monolayer-forming molecular species having a first functional group selected to attach to said surface, and a second functional group that is exposed when the species form a monolayer, said second group being polar,

- transferring the molecular species from the stamping surface to a first portion of the article surface, and

- allowing the molecular species to spread evenly from the first portion of the article surface to a second portion of the article surface, ~~characterized in that~~ wherein the spreading is accomplished without immersion in a liquid incompatible with the molecular species ~~with the stamp~~ and the article is placed in reduced pressure atmosphere.

2. (Currently Amended) A method of applying self-assembled monolayers of two molecular species to a surface of an article, comprising:

- providing on at least a portion of a stamping surface of a stamp a first self-assembled monolayer-forming molecular species having a first functional group selected to attach to said surface, and a second functional group that is exposed when the species form a monolayer, said second group being polar,

- transferring the molecular species from the stamping surface to a first portion of the article surface, characterized by

- providing on at least a portion of a stamping surface of a stamp a second self-assembled monolayer-forming molecular species having a first functional group selected to

attach to said surface, and a second functional group that is exposed when the species form a monolayer, said second group being polar or non-polar,

- transferring the molecular species from the stamping surface to said first portion of the article surface coated with a monolayer of said first molecular species, and

- allowing the second molecular species to spread evenly over the first monolayer to a second portion of the article's surface, ~~characterized in that wherein the spreading is accomplished without immersion in a liquid incompatible with the molecular species with the stamp~~ and the article is placed in a reduced pressure atmosphere.

3. (Canceled)

4. (Previously Presented) A method according to claim 2, wherein the second functional group of the second self-assembled monolayer-forming molecular species is non-polar.

5. (Previously Presented) A method according to any one of claims 1, or 4, wherein the gaseous atmosphere is air.

6. (Previously Presented) A method according to claim 5, wherein the article' surface is a metal surface and the self-assembled monolayer-forming molecular species is selected from the group consisting of:

- an omega-functionalized thiol having the general formula $R'-A-R''$, wherein R' is $-SH$, A is $-(CHR)_n-$ where R is H or $-CH_3$, and n is an integer from 1 to 30, and R'' is a polar group,

- a disulphide having the general formula $R'''-A-S-S-A'-R''$, wherein R''' is a polar or a non-polar group, A and A' independently are $-(CHR)_n-$ where R is H or $-CH_3$, and n is an integer from 1 to 30, and R'' is a polar group, different from or the same as R''' , and

- a thioether having the general formula $R'''-A-S-A''-R''$ or $R'''-A-S-A'-S-A''-R''$, wherein R''' is a polar or a non-polar group, A , A' , and A'' independently are $-(CHR)_n-$ where R is H or $-CH_3$, and n is an integer from 1 to 30, and R'' is a polar group, being different from or the same as R''' .

7. (Original) A method according to claim 6, wherein the polar group R'' is a functional group selected from the group consisting of -OH, -NCO, -NH₂, -COOH, -NO₂, -COH, -COCl, -PO₄²⁻, -OSO₃⁻, -SO₃⁻, -CONH₂, -(OCH₂CH₂)_nOH, -(OCH₂CH₂)_nOCH₃, -PO₃H⁻, -CN, -SH, -CH₂I, -CH₂Cl, and -CH₂Br, wherein n is an integer from 1 to 100.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) A method of manufacturing an electronic device comprising the steps of providing an article, applying to the surface of such article a self-assembled monolayer by the method of claim 1, wherein such self-assembled monolayer provides a patterned layer on the surface of such article.

11. (Withdrawn) The electronic device of claim 10, comprising a field effect transistor having a source and a drain electrode, a channel, a gate electrode and a gate dielectric, wherein such patterned layer defines the channel between the source and the drain electrode.

12. (Withdrawn) The electronic device of claim 10, wherein

- the article comprises at its surface a stack of a first patterned layer of electrically conductive material and a second layer of semiconductor material, in which first layer a first and a second, mutually isolated electrode are defined;

- the desired pattern is such that a perpendicular projection thereof on the first layer overlaps with the first and the second electrode;

- after defining the pattern, the second layer is etched with an etchant selected as one that removes unprotected semiconductor material, but leaves the pattern and the protected semiconductor material underlying the pattern unaffected.

13. (Cancelled)